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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/808,651	03/25/2004	Satoshi Natsume	1232-5356	6111
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EXAMINER WANG, KIENT F				
ART UNIT 2622		PAPER NUMBER		
NOTIFICATION DATE 09/17/2008		DELIVERY MODE ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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**Office Action Summary****Application No.**

10/808,651

**Applicant(s)**

NATSUME, SATOSHI

**Examiner**

KENT WANG

**Art Unit**

2622

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 July 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3 and 5-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 5-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/CIS)
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date: \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date: \_\_\_\_\_

**DETAILED ACTION**

***Information Disclosure Statement***

1. The reference listed on the disclosure statement (IDS) submitted on 07/14/2008 have being considered by the examiner (see attached PTO 1449).

***Response to Amendment***

2. The amendments, filed on 07/14/2008, have been entered and made of record. Claim 4 has been previous cancelled. Claims 1-3 and 5-10 are pending.

***Response to Arguments***

3. Applicant's arguments, see page 6-8, filed 07/14/2008, with respect to claims 1-3 and 5-10 have been considered but are moot in view of the new ground(s) of rejection.

***Claim Rejections - 35 USC § 103***

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
5. Claims 1-3 and 5-10 are rejected under 35 U.S.C. § 103(a) as being unpatented over Hirasawa (US 5,436,684) in view of Kyuma (US 5,883,666).

Regarding claim 1, Hirasawa discloses a drive controlling apparatus (inner focusing type lens system, Fig 1) for controlling a drive of a plurality of optical adjusting members (zoom lens 102, iris 103, and focus lens 105) included in an optical system of an optical apparatus (a video camera), comprising:

- a memory (a microcomputer 119, Fig 5) configured to store preset drive information (speed information) of each of the optical adjusting members (102, 103, and 105) which include at least one preset speed and at least one preset position (preset position and preset speed of the focus lens and zoom lens) (5:63-6:29);
- a controller (a microcomputer 119, Fig 5) configured to control the drive of each of the optical adjusting members (102, 103, and 105) on the basis of the preset drive information (preset position and preset speed of the focus lens and zoom lens), including a state in which the plurality of the optical adjusting members are simultaneously driven (a proper lens control can be performed while maintaining a miniaturization of the lens without enlarging an actuator of the lens) (4:58-68 and 6:41-68); and
- a selection member (a microcomputer 119, Fig 5) configured for a user to select a mode wherein the controller (119) sets a drive speeds for each optical adjusting member (actuators 107, 108, and 109 to drive the zoom lens, iris and focus lens according the speed information stored in 119) in accordance with the set conditions for the selected mode (drivers 110, 111, and 112, Fig 5) (5:63-6:19).

Hirasawa does not teach a selection member configured for a user to select a mode from a plurality of modes, each mode having set conditions that correspond to the preset drive information wherein one of the plurality of modes includes set conditions that set the drive speed of a first optical adjusting member of the plurality of optical adjusting members to a preset speed, and to set the drive speed of a second optical adjusting member to a speed

calculated from the drive speed of the first optical adjusting member such that the drive of the plurality of first and second optical adjusting members up to the preset positions stored in the memory are substantially simultaneously completed. However, Kyuma teaches a selection member (key operation 20, Fig 3) configured for a user to select a mode from a plurality of modes (20 is an operation unit comprising a plurality of operation keys to make various types of operations; 6:63-7:7), each mode having set conditions that correspond to the preset drive information (LUT 19a, 19b, 19c are data look-up tables which store various types of data; 6:42-56) wherein one of the plurality of modes includes set conditions that set the drive speed of a first optical adjusting member (14 is an iris driving circuit for driving the iris motor, Fig 3) of the plurality of optical adjusting members to a preset speed, and to set the drive speed of a second optical adjusting member (12 is a CCD driving circuit for controlling the accumulation, reading and reset operations of the image pickup element 3, Fig 3) to a speed calculated from the drive speed of the first optical adjusting member (14) such that the drive of the plurality of first and second optical adjusting members (14 and 12) to the preset positions stored in the memory (the photographing situation with reference to data in LUT 19a, 19b, 19c; 7:33-46) are substantially simultaneously completed (as shown in Fig 3, a plurality of look-up tables storing a plurality of control functions for the control of parameters are set, wherein a plurality of tables such as LUT19a, LUT19b, LUT19c are prepared in the memory such as a ROM and selectively read out by the system control circuit 25, and this selection can be made with the key operation in the operation unit 20, and the control characteristics of each parameter to be controlled by data read from the LUT 19a, 19b, 19c are exemplified in Figs 9-10, as various types of parameters for use with the

exposure control in the device include iris control parameter, shutter control parameter, AGC gain, AE weighting parameter, AE reference value parameter, image quality parameter adjustment parameter, and image effect processing parameter) (5:59-7:52 and 10:61-68, Kyuma).

Thus it would have been obvious to one of ordinary skill in the art at the time this invention was made to have used the selection member as taught by Kyuma as modified by Hirasawa so that it makes possible to provide an image pickup device capable of making the switching between a plurality of photographing modes smoothly and capable of taking a picture of any object always optimally and in all photographing conditions (2:38-46, Kyuma).

Regarding claim 2, Hirasawa discloses one of the plurality of modes includes set conditions (reference numerals 110, 111, and 112 denote drivers to generate energies for driving the actuators 107, 108, and 109 in response to drive commands, respectively; and 113, 114, and 115 encoders for detecting states of the zooming lens group 102, iris 103, and focusing lens group 105, namely, positions, movement amounts, and the like of them, for converting into electric signals) that set the drive speed of each optical adjusting member (zooming lens, 102 and focusing lens, 105, Fig 5) to a maximum speed at which the optical adjusting member can be driven (when the zoom magnification is raised while suppressing the size of lens barrel, the gradient on the telephoto side suddenly increases, therefore to trace it with a high fidelity, the maximum speed at which the actuator of the focus lens can drive and improved with an increase in zoom magnification) (5:63-6:19 and 6:30-40).

Regarding claim 3, Hirasawa discloses one of the plurality of modes includes set conditions (drive control of the zooming lens group 102, iris 103, and focusing lens group 105) that set the drive speed of each optical adjusting member (102, 103, and 105) to a preset speed stored in the memory (the speed information of each zoom zone in Fig 3 has been stored as a table in the microcomputer 119) (6:20-29).

Regarding claim 5, the limitations of claim 1 are taught above, Hirasawa discloses one of the plurality of modes includes set conditions that set a first drive speed (zoom speed setting) of the first optical adjusting member (zooming lens, 102, Fig 5) to a preset speed (speed information stored as a table in the microcomputer 119, Fig 5), the first drive speed (zoom speed setting) being a speed at which the drive of the first optical adjusting member (102) is most quickly completed when the first optical adjusting member (102) is driven to a preset position, and set the drive speed of the second optical adjusting member (memory position preset zoom switch 21, speed preset zoom switch 22, and the boomerang zoom switch 23) such that the drive of the first and second of optical adjusting members to the preset positions stored in the memory (step S108, Fig 6) are substantially simultaneously completed (after completion of the execution, the result of the calculation is stored in step S108 and the processing routine is returned to step S102) (7:1-19 and 52-68).

Regarding claim 6, the limitations of claim 1 are taught above, Hirasawa discloses one of the plurality of modes includes set conditions that set a first drive speed (zoom speed setting) of the first optical adjusting member (zooming lens, 102, Fig 5) to a preset speed (speed information stored as a table in the microcomputer 119, Fig 5), the first drive speed being a speed at which the drive of the first optical adjusting member (102) is most slowly completed

when the first optical adjusting member (102) is driven to the preset position, and set the drive speed (focus lens speed adjustment) of the second optical adjusting member (focusing lens, 105, Fig 5) such that the drive of the first and second optical adjusting members up to preset positions stored in the memory (step S108, Fig 6) are substantially simultaneously completed (after completion of the execution, the result of the calculation is stored in step S108 and the processing routine is returned to step S102) (7:1-19 and 52-68).

Regarding claim 7, the limitations of claim 1 are taught above, Hirasawa discloses a characteristic setting member (microcomputer 119, Fig 5) for variably setting a drive characteristic of the optical adjusting member (camera having an inner focusing type lens system which having a variable speed zoom function), including at least one of a start time and a completion time (102 the zooming lens group can variably change a magnification and 105 the focusing lens group having a function to correct the movement of a focal plane in association with the variable magnification and a focus adjusting function) (5:52-62, 8:19-25 and Fig 6).

Regarding claim 8, this claim recites same limitations as claim 1. Thus it is analyzed and rejected as previously discussed with respect to claim 1 above.

Regarding claim 9, this claim differs from claim 1 only in that the claim 9 includes a camera attached with the optical apparatus. Hirasawa discloses an image-taking system (a photographing apparatus) comprising a camera (a video camera) attached with the optical apparatus (an inner focusing type lens system) (see 1:10-12 and 6:30-40). Thus claim 9 is analyzed and rejected as previously discussed with respect to claim 1 above.



Regarding claim 10, this claim recites same limitations as claim 9. Thus it is analyzed and rejected as previously discussed with respect to claim 9 above.

***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Makino et al. (US 4,735,494), Tanaka (US 6,967,686), Kubo et al. (US 6,822,686), Yoshikawa et al. (US 6,633,729), and Ohta (US 6,989,865).
7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kent Wang whose telephone number is 571-270-1703. The examiner can normally be reached on 8:00 A.M. - 5:30 PM (every other Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ngoc Yen Vu can be reached on 571-272-7320. The fax phone number for the organization where this application or proceeding is assigned is 571-270-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://portal.uspto.gov/external/portal/pair>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

KW  
9 September 2008

*/Ngoc-Yen T. VU/  
Supervisory Patent Examiner, Art Unit 2622*